

ADMINISTRATIVE ORDER NO. WFX-727

APPLICATION OF PENNZOIL EXPLORATION AND PRODUCTION COMPANY TO EXPAND ITS WATERFLOOD PROJECT IN THE ATOKA-SAN ANDRES POOL IN EDDY COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-3476, Pennzoil Exploration and Production Company has made application to the Division on September 26, 1997 for permission to expand its Atoka San Andres Waterflood Project in the Atoka-San Andres Pool in Eddy County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

(1) The application has been filed in due form.

(2) Satisfactory information has been provided that all offset operators have been duly notified of the application.

(3) No objection has been received within the waiting period as prescribed by Rule 701(B).

(4) The proposed injection wells are eligible for conversion to injection under the terms of Rule 701.

(5) The proposed expansion of the above referenced waterflood project will not cause waste nor impair correlative rights.

(6) The application should be approved.

IT IS THEREFORE ORDERED THAT:

The applicant, Pennzoil Exploration and Production Company, be and the same is hereby authorized to inject water into the San Andres formation at approximately 1430 feet to approximately 1833 feet through 2 3/8-inch plastic lined tubing set in a packer located within 100 feet of the uppermost injection perforations in the following described wells, for purposes of secondary recovery to wit: Administrative Order WFX-727 Pennzoil Exploration and Production Company November 18, 1997 Page 2

> Atoka San Andres Unit Well No.120 330' FSL & 990' FWL UL 'M', Section 11, Township 18 South, Range 26 East, Injection Interval Approximately: 1636 feet to 1692 feet Maximum Injection Pressure: 327 psig

> Atoka San Andres Unit Well No.132 990' FNL & 2310' FWL UL 'C', Section 14, Township 18 South, Range 26 East, Injection Interval Approximately: 1512 feet to 1687 feet Maximum Injection Pressure: 302 psig

> Atoka San Andres Unit Well No.136 2310' FNL & 1650' FEL UL 'G', Section 14, Township 18 South, Range 26 East, Injection Interval Approximately: 1621 feet to 1805 feet Maximum Injection Pressure: 324 psig

All wells NMPM, Eddy County, New Mexico.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

As there was insufficient data supplied with the application to allow for higher injection pressures, the injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection wells to no greater than .2 psi per foot of depth to the uppermost injection perforations.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the San Andres formation. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office. Administrative Order WFX-727 Pennzoil Exploration and Production Company November 18, 1997 Page 3

The operator shall notify the supervisor of the Artesia district office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity tests so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Artesia district office of the Division of the failure of the tubing, casing or packer in said wells and shall take such steps as may be timely and necessary to correct such failure or leakage.

The subject wells shall be governed by all provisions of Division Order No. R-3476 as amended and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

<u>PROVIDED FURTHER THAT</u>, jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, the Division may, after notice and hearing, terminate the injection authority granted herein.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject wells, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

DONE at Santa Fe, New Mexico, on this 18th day of November, 1997.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION WILLIAM J. LEMAY Director

SEAL

WJL/BES

cc: Oil Conservation Division - Artesia Case File No.3831